

# QUEENSLAND FLOODS COMMISSION OF INQUIRY

## Further submissions of Mid Brisbane River Irrigators Inc (MBRI)

---

### Introduction

1. MBRI:
  - (a) thank the Commission for re-convening;
  - (b) have had and continue to have great faith in the Inquiry and the process by which recommendations are developed by it;
  - (c) believe that media suggestions of incompleteness in the Inquiry's investigations could not be left unanswered.
2. MBRI therefore applaud the re-opening of the Inquiry.

### MBRI position

3. MBRI supports and adopts parts 1 to 11 of the closing submission from Counsel assisting the Commission, save that MBRI wish to advance their own suggestions for the making of recommendations by the Commission.

### Importance

4. While more than 20 years have passed since the Report of the Fitzgerald Inquiry, Queenslanders still benefit from the significant reforms which arose out of the implementation of the recommendations in the Inquiry Report. Likewise, the recommendations of the Forde Inquiry have lead to significant changes in the way organisations involved in the care of vulnerable citizens are held to account.
5. Although the subject of this Commission differs from those Inquiries, Queensland communities, including members of the MBRI, look to the recommendations of this Inquiry to form the basis of changes which will better protect life and property from flood devastation.

### Hopes for the ultimate outcome

6. The members of the MBRI are a group exposed to devastating and traumatic losses when sudden large releases occur at nearby Wivenhoe Dam. Their losses on Tuesday 11 January 2011 arose from large-scale inundation of stock, farms, businesses, homes and infrastructure – refer Annexure 7 to the MBRI Submission of March 2011, paragraphs 96 to 115; second Statement of Kenneth Leroy Schmidt made 13 May 2011.

7. The inundation of MBRI members' properties affected an area stretching from Wivenhoe Dam spillway along the Brisbane River to Fernvale, 14 kilometres away and further south along both sides of the river to Pine Mountain 50 kilometres from Wivenhoe Dam.
8. Comparisons between the 1974 flood and the 2011 flood as advised in the emails sent to MBRI members from SEQWater are as follows - refer MBRI Submission of March 2011, paragraph 93; and Transcript of Kenneth Leroy Schmidt, 19 May 2011 page 2315 at 19 - 21.
 

• Lowood	1974 – 22 metres	2011 – 25.09 metres
• Savages Crossing	1974 – 23.8 metres	2011 – 24.13 metres
9. There was greater devastation in 2011 in the Lowood – Fernvale area since, in that event, the water was faster moving because of it having been released from height at Wivenhoe Dam. Transcript of Kenneth Leroy Schmidt, 19 May 2011 page 2316 lines 50 – 60.
10. The objectives in the SEQWater Manual of Operational Procedures at Wivenhoe Dam and Somerset Dam Revision 7 (“the Manual”) confine that of “protecting against inundation” to urban areas. Protection of rural lifestyle is only related to the lower order objectives directed to keeping open seven specified river crossings in the early stages of an event. The Manual does not include any objective which expressly, or by implication, seeks to protect from inundation the farms and villages along the mid Brisbane River.
11. Members of the MBRI look to the Inquiry as a means of achieving:
  - (a) reform to the management of the Flood Operation Centre;
  - (b) revision of the Manual of Operational Procedures for Flood Mitigation at Wivenhoe Dam and Somerset Dam (“the Manual”);
  - (c) greater efficiencies in flood mitigation and risk management;
  - (d) peace of mind for themselves, families and staff; and
  - (e) clear rules governing the operation of the dam which in the long term will restore confidence in the area and rebuild the drastically depreciated values of their properties.

### **Inquiry Progress to date**

12. The members of the MBRI are grateful for the steps taken, as a consequence of the work of the Inquiry, to have the Wivenhoe lake level reduced to 75% of FSL prior to the start of the 2011/12 wet season.
13. As well, comfort has been taken from the fact that the Interim Report recommended revision of the Manual. However, Revision 9 should be but a step along the way to a better flood manual, and this is dealt with further below.

## Issues Specific To the Re-Opening

14. MBRI has a legitimate interest in the effectiveness of the management and governance of the corporate entities which were responsible for the operation and control of Somerset and Wivenhoe Dams during the 2011 flood crisis.
15. MBRI has participated in the hearings during the re-opening with the objective of assisting the Commission to establish the facts relevant to the Flood Mitigation Manual strategies in use at the various stages of the January flood event.
16. Since there are conflicting records, the Commission of Inquiry needs to find the correct historical version of the strategies applied.
17. If any person or entity is found to have been at fault, the nature and cause of failure needs to be probed in order that appropriate recommendations can be made to protect against repetition.
18. Members of the MBRI, in common with other Queenslanders, are dependent on the effectiveness of the corporate entities which the state government has made responsible for the operation and control of dams and other infrastructure during flood events. Should the performance of any employee or employees of those bodies be found to be inadequate, that reflects on their employers and suggests a need for reform of the way in which their employers manage the assets entrusted to their care.
19. Further, if the strategy labels were falsely assigned during the writing of the March Report, was this done to avoid revealing a breach of the Manual?

## The Simple Facts

20. The SEQWater March Report (“the March Report”) says that the operation of Wivenhoe Dam went from strategy W1 to strategy W3 at 8a.m. on Saturday 8 January, 2011. Yet, as late as 8.25a.m. on Monday 10 January, 2011 Mr Drury, the SEQWater Dam Operations Manager, responded to the simple question from Mr Dan Spiller Acting Water Grid CEO “Are you now operating under release strategy W2 or W3?”, with the answer – nine and a half minutes later – “W2”; Exhibit 430 Vol 1 page 322.
21. Other records are inconsistent with there being a change from W1 to W3 at 8a.m. on Saturday 8 January. They include:-
  - (a) the summary document (p2 with W1 – W4 dotpoints) - Exhibit 1050;
  - (b) the Ministerial briefing - Exhibit 1068;
  - (c) the Cooper Report - Exhibit 414;

- (d) the note of the meeting held on Sunday 9 January 2011 - Exhibit 1093 page 5;
  - (e) the Flood Control Centre – Event Log - Exhibit 430 RD5 -1677;
  - (f) e-mail from ‘DutyEngineer’ to ‘jtibaldi’ sent Saturday 15 January 6:57pm – Exhibit 1051;
  - (g) e-mail from John Tibaldi to ‘Duty Seq’ sent Saturday 15 January 7:51pm – Exhibit 1052;
  - (h) e-mail from Duty Engineer to Peter Allen and ‘rdrury’ sent Monday 17 January 1:03pm – Exhibit 1076;
  - (i) e-mail from Duty Engineer to John Ruffini sent 17 January 2011 at 6:06pm – Exhibit 1077.
22. Note that in the Flood Event Log - Exhibit 23, for Sunday 9 January 2011 at 3:30pm the reference to strategy ‘W2’ has been removed from column headed ‘Category’ and the identifying ‘W’ strategy has been removed from its last shown line before each change.
23. The data in the Flood Event Log, Exhibit 23, appears to be identical to those items in (e), (f) and (g) above save for the removal of ‘W2’. The file reference ‘Procedure FLX41107 Appendix 1’ appears on all those spreadsheet documents including Exhibit 23 which has been edited.
24. No person was able to identify the data in (e), (f) and (g) as ‘Flood Control Centre – Event Log’.
25. The covering sheet for the Flood Control Centre - Event Log (which is exhibited to Mr Drury’s statement as Exhibit 430, on page RD5-1678) shows the identical file reference.

## **The Spotlight**

26. During the latter stages of the flood event, the disastrous damage lead to demands for answers from the community, political leaders and the media. Inevitably, attention turned to the work of the Engineers in the Flood Operation Centre during the event.
27. SEQWater, at the most senior level, committed the organisation to preparation of a comprehensive report. A senior executive Mr Pruss went off line for several weeks to supervise the project. An experienced flood engineer, Mr Tibaldi was tasked with writing up the history of the actions of the F.O.C. during the event.
28. None of the four flood engineers, Mr Tibaldi, Mr Malone, Mr Ruffini and Mr Ayre, dispute that the flood event Manual strategies were assigned retrospectively during the drafting of the March Report.
29. However, as the further submission of Counsel Assisting demonstrates, the March Report has been discredited.

## Why This Matters

30. The MBRI submission to the Queensland Floods Inquiry dated 11 March, 2011 Exhibit 422 dealt extensively with MBRI's criticisms of the way in which the FOC engineers applied the Manual during the January 2011 flood event.
31. The theme of the MBRI Submission is captured in paragraph 122 namely:

*The MBRI believes that the recent flood event was made worse by the release strategy selected by the Dam operators. After viewing the FOM post the flood it is evident that the W1 release strategies were used from the beginning of the flood, right through to Monday morning, 10 January, 2011.*
32. The March report contained a history which contradicted the MBRI Submission. It is therefore highly relevant that the March report has been discredited. Further, the strategy "labels" recorded in the March report are in part the foundation for any evaluation of the effectiveness of the Manual in place at the time of the January 2011 flood event. Historical data informs those who are tasked with revising and formulating flood event manuals for the future. The data needs to be accurate if reports and reviews founded upon it are to have any worth.
33. Since retrospective application of "labels" led to alterations of earlier records of the Wivenhoe strategies, there are serious organisational weaknesses in SEQWater which need to be remedied and avoided in the future.
34. Further, MBRI submits that the peer reviews, which are in evidence, are based on parts of the March Report which is now discredited. As a consequence the peer reviews are worthless. The raw data used is flawed and there is no evidence to show that the reviewers sought any material other than that provided by the engineers.
35. The March Report (or an earlier draft of it) has, it appears, provided the historical background adopted in the Reports of Mr Babister. If it is ultimately found that retrospective application of strategy "labels" has distorted the history of the operation of Wivenhoe Dam during the flood event, it calls in to question the opinions in the series of Babister Reports and, hence, their usefulness.
36. The second DHI Submission, if accepted, leads to the conclusion that data collected and used in the reports by Mr Babister is seriously flawed. The second DHI Submission supports MBRI response to the WMA Report of July 2011, in that, there is no engineering or hydrology in the SEQ modelling above Mt Crosby.
37. In its submission of 11 March 2011, the MBRI challenged appropriateness and timing of releases from Wivenhoe Dam during the January 2011 flood event. As a consequence of the unreliability of the history of strategy movements in the March report, the MBRI reiterates its view that the releases were inappropriate.

38. On the MBRI view, the engineers were slow to act on Sunday night (9 January 2011) at a time when rainfall was already entering the Dam. They had the option to go to any release but did not act until Tuesday morning. Model run 23 gave them the option of any release under W3 or W4. MBRI submits that if the engineers had acted promptly at 1a.m. Monday 10 January 2011 the dam releases would have remained below 4,000 cumecs throughout the event. Transcript R. Ayre pages 78 to 96
39. Since the March Report contains inaccurate historical data as to strategy levels, the Commission should review the relevant parts of its published Interim Report; in particular, parts relevant to the operation of Wivenhoe and Somerset Dams and the Manual. This is because the Commission, in writing the Interim Report, appears to have not doubted the accuracy of the historical account contained in the March Report.

### **The Manual**

40. During the January 2011 flood event, Revision 7 of the Manual was current. Following revision, Revision 9 now applies. The evidence presented at the re-opening of the Commission provides a basis for a Commission recommendation that there be a further revision of the Manual. There are a number of issues which need to be dealt with and a further revision is the appropriate means of doing so. The issues are explained below.
41. Some of the witnesses said that there was very little if any difference, in their opinion, between W2 and W3. Another witness said that W2 would only be utilised in very rare circumstances. Others said that the boundary between W2 and W3 was blurred. There was also a body of opinion that W2 is unnecessary.
42. Additionally, as Commissioner Holmes pointed out, the flow chart in Revision 7 was inconsistent with the text dealing with how the engineers were to move from W2 to W3.
43. Further to that, the use of the term "transition" was confusing in that it, on one view, suggested that the Manual mandated a sequential approach with strategies stepping from W1 to W2 to W3. The evidence from the flood engineers was that was not the approach which they took and had taken in the past in that the flood engineers believed they were able to bypass W2.
44. As well, W1 through its five apparently sequential stages has the express objective of regulating the stages at which the seven bridges downstream of Wivenhoe Dam are taken out of use by rising river levels.
45. The protection of the bridges results from the incompatibility between downstream bridge infrastructure and the efficient management of releases from Wivenhoe Dam.
46. If sufficient capital were invested to lift the height of the bridges, the W1 strategies would be unnecessary and the constraints on the releases from Wivenhoe under the W1 strategies would be redundant.

47. While a revision of the Manual is not going to lead to the building of higher bridges, a review of the Manual should, critically examine whether each individual bridge should be protected, at all, in a flood event and, if so, for how long.
48. The members of the MBRI have a vital interest in the Manual because the strategies under the Manual bear directly on the timing and volume of releases from Wivenhoe Dam. Those factors are what ultimately determine whether massive level W4 releases of the kind experienced during the January 2011 flood event, have to be made to protect the fuse plugs at Wivenhoe Dam.
49. Because of the direct interest of the MBRI in these matters, and the bearing that the Manual strategies have on the future flood protection of properties adjacent to the mid Brisbane River, the MBRI asks for a recommendation that the organisation be genuinely consulted in the proposed further review of the Manual.
50. Revision 9 of the Manual is written against the backdrop of the March Report. The history in the March Report is manifestly inaccurate. Consequently, parts of Revision 9 are likely to be distorted and unreliable. Therefore, the need to commence a further review of the Manual is urgent.

### **Fatigue Issues**

51. The evidence of the Flood Inquiry suggests strongly that 12 hour shifts in the FOC are not conducive to optimum performance. This is an issue for management which should receive attention to ensure that rostering practices and staff numbers each shift are such as to ensure effective operation of the key emergency service during flood events.

### **Key Objectives of MBRI**

52. The MBRI has high priority items:
  - (a) ensuring that Wivenhoe lake levels are reduced, by controlled pre-wet season releases, to 75% of FSL each year;
  - (b) that the Manual be revised so as to make it –
    - (i) unambiguous;
    - (ii) sensitive to weather forecasts;
    - (iii) less likely to require massive W4 releases in the event of a large scale rain event in the Wivenhoe catchment.

### **Recommendations sought**

53. In addition to the matters sought in their earlier submission, MBRI further submits that the Inquiry should recommend that:
- (a) that the applicable W or S strategy, as defined in the Manual, be logged each hour during a flood event;
  - (b) non editable flood logs – “black box style” be used in the FOC;
  - (c) the Manual be revised and rewritten;
  - (d) MBRI be consulted as part of the Manual Revision process;
  - (e) the management of FOC be independently reviewed;
  - (f) Wivenhoe Lake levels be reduced to 75% of FSL prior to the commencement of each summer wet season;
  - (g) the State Co-ordinator General cost the replacement/lifting of the height of the seven downstream bridges particularized in W1 of the manual and that the State or applicable Local Government, as the case may be, budget for the work;
  - (h) in the interim, the bridges at Twin Bridges, Savages Crossing and Colleges Crossing be excluded from W1;
  - (i) the flood modelling used by SEQWater be independently reviewed to ensure that best practice modelling, including software, is in use;
  - (j) the profession qualifications and experience of engineers available to staff the Flood Operations Centre be reviewed to ensure there is adequate professional capability in all relevant disciplines; for example hydraulics and applied river hydraulics;
  - (k) a fatigue management policy be introduced for the FOC and that an independent expert review shift lengths, rostering practices and staff numbers in the FOC.

*J E Murdoch SC  
Counsel for MBRI Inc  
Instructed by Gallagher Legal  
16 February 2012*